Claims

1. A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, said method comprising measuring the level of sFlt-1, VEGF, or PlGF polypeptide in a sample from said subject.

2. A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, by measuring the levels of at least two of sFlt-1, VEGF, and PlGF polypeptides in a sample from said subject and calculating the relationship between said levels of sFlt-1, VEGF, or PlGF using a metric, wherein an alteration in the relationship between said levels in the subject sample relative to a reference sample, diagnoses pre-eclampsia or eclampsia or a propensity to develop pre-eclampsia or eclampsia in said subject.

3. The method of claim 2, wherein said metric is a pre-eclampsia anti-angiogenic index (PAAI):[sFlt-1/VEGF + PlGF].

4. The method of claim 3, wherein a PAAI value greater than 20 is a diagnostic indicator of pre-eclampsia or eclampsia.

5. The method of claims 1 or 2, wherein said measuring is done using an immunological assay.

6. The method of claim 5, wherein said immunological assay is an ELISA.

7. The method of claims 1 or 2, wherein said sample is serum.

8. The method of claims 1 or 2, wherein a level of sFlt-1 greater than 2 ng/ml is a diagnostic indicator of pre-eclampsia or eclampsia.

9. The method of claims 1 or 2, wherein the level of sFlt-1 is the level of free, bound, or total sFlt-1.

10. The method of claims 1 or 2, wherein the level of VEGF or PlGF is the level of free VEGF or PlGF.

11. A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, said method comprising measuring the level of sFlt-1, VEGF, or PlGF nucleic acid molecule in a sample from said subject and comparing it to a reference sample, wherein an alteration in said levels diagnoses pre-eclampsia or eclampsia in said subject, or diagnoses a propensity to develop pre-eclampsia or eclampsia.

12. A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, said method comprising determining the nucleic acid sequence of a sFlt-1, VEGF, or PlGF gene in a sample from a subject and comparing it to a reference sequence, wherein an alteration in the subject's nucleic acid sequence that is an alteration that changes the expression level of the gene product in said subject diagnoses the subject with pre-eclampsia or eclampsia, or a propensity to develop pre-eclampsia or eclampsia.

13. The method of claims 1, 2, 11, or 12, wherein said sample is a bodily fluid of said subject in which said sFlt-1, VEGR, or PlGF is normally detectable.

14. The method of claim 13, wherein said fluid is selected from the group consisting of urine, amniotic fluid, serum, plasma, or cerebrospinal fluid.

15. The method of claims 1, 2, 11, or 12, wherein said sample is a cell.

16. The method of claim 15, wherein said cell is an endothelial cell.

17. The method of claim 15, wherein said cell is a leukocyte.

18. The method of claim 15, wherein said cell is a monocyte.

19. The method of claim 15, wherein said cell is a cell derived from the placenta.

20. The method of claims 1, 2, 11, or 12, wherein said sample is a tissue.

21. The method of claim 20, wherein said tissue is a placental tissue.

22. The method of claims 1, 2, 11, or 12, wherein said subject is a non-pregnant human and method diagnoses a propensity to develop pre-eclampsia or eclampsia.

23. The method of claims 1, 2, 11, or 12, wherein said subject is a pregnant human.

24. The method of claims 1, 2, 11, or 12, wherein said subject is a post-partum human.

25. The method of claims 1, 2, 11, or 12, wherein said subject is a non-human.

26. The method of claims 1, 2, 11, or 12, wherein said subject is a non-human selected from the group consisting of a cow, a horse, a sheep, a pig, a goat, a dog, or a cat.

27. The method of claims 1, 2, 11, or 12, wherein at least one of said levels measured is the level of sFlt-1.

28. The method of claims 1, 2, 11, or 12, wherein when the level of VEGF is measured then the level of either sFlt-1 or PlGF is also measured.

29. The method of claims 1, 2, 11, or 12, wherein an increase in the level of sFlt-1 nucleic acid or polypeptide relative to a reference is a diagnostic indicator of pre-eclampsia or eclampsia.

30. The method of claims 1, 2, 11, or 12, wherein a decrease in the level of free VEGF nucleic acid or polypeptide relative to a reference is a diagnostic indicator of pre-eclampsia or eclampsia.

31. The method of claims 1, 2, 11, or 12, wherein a decrease in the level of free PlGF nucleic acid or polypeptide relative to a reference is a diagnostic indicator of pre-eclampsia or eclampsia.

32. The method of claims 1, 2, or 11, wherein said measuring of levels is done on two or more occasions and a change in said levels between measurements is a diagnostic indicator of pre-eclampsia or eclampsia.

33. A kit for the diagnosis of pre-eclampsia or eclampsia in a subject comprising a nucleic acid sequence selected from the group consisting of sFlt-1,

VEGF, and PlGF nucleic acid molecule or a sequence complementary thereto, or any combination thereof.

34. The kit of claim 33, wherein said nucleic acid sequence comprises at least two nucleic acid probes for the detection of said nucleic acid molecule.

35. A kit for the diagnosis of pre-eclampsia or eclampsia in a subject comprising a means of detecting a sFlt-1, VEGF, or PlGF polypeptide, or any combination thereof.

36. The kit of claim 35, wherein said means of detecting is selected from the group consisting of an immunological assay, an enzymatic assay, and a colorimetric assay.

37. The kit of claims 33 or 35, wherein said kit diagnoses a propensity to develop pre-eclampsia or eclampsia in a pregnant or a non-pregnant subject.

38. The kit of claims 33 or 35, wherein said kit detects sFlt-1.

39. The kit of claims 33 or 35, wherein said kit detects PlGF.

40. The kit of claims 33 or 35, wherein when said kit detects VEGF, sFlt-1 or PlGF is also detected.